



[7590-01-P]

## NUCLEAR REGULATORY COMMISSION

### 10 CFR Chapter I

[NRC-2020-0065]

#### Transfer of Very Low-Level Waste to Exempt Persons for Disposal

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Proposed interpretive rule; request for comments.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing a proposed interpretation of its low-level radioactive waste disposal regulations that would permit licensees to dispose of waste by transfer to persons who hold specific exemptions for the purpose of disposal. The NRC will consider approval of requests for specific exemptions for the purpose of disposal if they are for the disposal of very low-level radioactive waste by land burial. Therefore, the NRC's intent is that this interpretive rule will allow licensees to transfer very low-level radioactive waste to exempt persons for the purpose of disposal by land burial. The NRC is requesting comment on this proposed interpretive rule.

**DATES:** Submit comments on the proposed interpretive rule by **[INSERT DATE 45 DAYS FROM DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received before this date.

**ADDRESSES:** You may submit comments by any of the following methods:

- **Federal Rulemaking Web site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2020-0065**. Address questions about NRC docket IDs in Regulations.gov to Jennifer Borges; telephone: 301-287-9127; e-mail:

Jennifer.Borges@nrc.gov. For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **Mail comments to:** Office of Administration, Mail Stop: TWFN-7-A60M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Program Management, Announcements and Editing Staff.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** Marlayna Doell, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-3178; e-mail: Marlayna.Doell@nrc.gov.

## **SUPPLEMENTARY INFORMATION:**

### **I. Obtaining Information and Submitting Comments**

#### **A. Obtaining Information**

Please refer to Docket ID **NRC-2020-0065** when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- **Federal Rulemaking Web site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2020-0065**.

- **NRC’s Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Document collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209,

301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

#### B. Submitting Comments

Please include Docket ID **NRC-2020-0065** in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <https://www.regulations.gov> as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

## II. Background

The NRC's regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20, Subpart K, "Waste Disposal," govern the disposal of licensed material by NRC licensees. Section 20.2001 provides the general requirements for disposal, and paragraph (a) requires that a licensee only dispose of licensed material using the

methods listed in that paragraph. The authorized method of disposal listed in paragraph (a)(1) is “transfer to an authorized recipient as provided in § 20.2006 or in the regulations in parts 30, 40, 60, 61, 63, 70, and 72 of this chapter.” Parts 30, 40, and 70 of 10 CFR contain provisions that authorize the transfer of material to exempt persons. Specifically, §§ 30.41(b)(3)-(b)(4), 40.51(b)(3)-(b)(4), and 70.42(b)(3)-(b)(4) each provide that “[e]xcept as otherwise provided in his license...any licensee may transfer [byproduct, source, or special nuclear] material: [t]o any person exempt from the licensing requirements of the Act and regulations in this part, to the extent permitted under such exemption; [or] [t]o any person in an Agreement State, subject to the jurisdiction of that State, who has been exempted from the licensing requirements and regulations of that State, to the extent permitted under such exemption.” The NRC’s guidance on § 20.2001 states that the transfer of material to exempt persons is not an authorized method of disposal. This guidance is contained in NUREG-1736, “Consolidated Guidance: 10 CFR Part 20 – Standards for Protection Against Radiation,” Section 3.20.2001. This guidance explains that an “authorized recipient is a person or an organization licensed to possess the material being transferred.” With respect to exemptions, the guidance explains that “[e]xemption of certain types, quantities, or concentrations of materials from the licensing requirements applies to the initial decision of whether or not the material should be licensed. However, once licensed, no quantity of that material, however small, is exempt from the applicable regulations in this section.”

The proposed interpretive rule provided in this notice would modify the current guidance that states that § 20.2001 only allows the transfer of licensed material for disposal to licensed persons. The proposed interpretive rule would allow the transfer of

licensed material to persons who hold specific exemptions, issued pursuant to §§ 30.11, 40.14, or 70.17, if those exemptions are for the purpose of disposal.

### **III. Proposed Interpretive Rule**

Pursuant to § 20.2001(a)(1), licensees may dispose of licensed material by transfer, in accordance with §§ 30.41(b)(3)-(b)(4), 40.51(b)(3)-(b)(4), and 70.42(b)(3)-(b)(4), to persons who hold specific exemptions issued pursuant to §§ 30.11, 40.14, and 70.17 for the purpose of disposal.

This interpretive rule would only apply to persons who hold specific exemptions from the licensing requirements of the Atomic Energy Act and the regulations in Parts 30, 40, or 70. The basis for this limitation is that Parts 30, 40, and 70 are the only parts listed in § 20.2001(a)(1) that contain provisions, namely §§ 30.41, 40.51, and 70.42, that explicitly permit the transfer of licensed material to exempt persons. Therefore, this interpretive rule would not apply to exemptions issued under other parts of 10 CFR. For example, this interpretive rule would not apply to exemptions issued under § 61.6, because no provision in Part 61 permits the transfer of licensed material to exempt persons.

This interpretive rule would also only apply to the transfer of licensed material to persons who hold specific exemptions for disposal because §§ 30.41, 40.51, and 70.42 only permit transfer to exempt persons “to the extent permitted under such exemption.” The NRC’s regulations contain several regulatory exemption provisions, for example, §§ 30.14, “Exempt concentrations,” and 30.18, “Exempt quantities.” These provisions exempt persons from the requirement to obtain a license to receive, possess, use, transfer, own, or acquire certain material. However, these provisions do not permit the exempt person to dispose of licensed material. In other words, most regulatory

provisions that exempt persons from the requirement to obtain a license to possess or use material do not authorize that exempt person to receive licensed material from others and then dispose of that material. Under this interpretation, such an exempt person must hold a specific exemption for possession and disposal in order to be authorized to dispose of that material. The NRC may grant specific exemptions for disposal in accordance with the “Specific exemption” provisions in §§ 30.11, 40.14, and 70.17. The section in this notice titled “Specific Exemptions for Disposal” explains the criteria that the NRC will use to review applications for specific exemptions for the purpose of disposal.

This interpretive rule would not supplant any disposal method currently authorized under the NRC’s regulations. Rather, this interpretive rule would modify the guidance in NUREG-1736 that states that licensees may only dispose of licensed material under § 20.2001(a)(1) by transferring it to licensed persons. By modifying the guidance in this way, the interpretive rule describes a method by which licensees could dispose of licensed material—by transfer to persons who hold specific exemptions for the purpose of disposal.

In accordance with §§ 30.41(b)(4), 40.51(b)(4), and 70.42(b)(4), this interpretive rule would permit NRC licensees to transfer licensed materials to persons who hold specific exemptions for disposal issued by Agreement States as well. Like the NRC, Agreement States have the authority to exempt persons from the requirement to hold a license when doing so continues to adequately protect the public health and safety from radiation hazards. The NRC recognizes that Agreement States’ exemptions may not be titled “exemption” or be in the same form as NRC exemptions. Agreement States’ regulatory approvals might be exemptions or be in another form, such as an approval

letter. This is due, in part, to the fact that the exemption provisions in §§ 30.11, 40.14, and 70.17 are category D compatibility regulations, which Agreement States are not required to adopt for purposes of compatibility. Where Agreement States have exercised their exemption authority to authorize persons who do not hold a license to receive and dispose of licensed material, this interpretive rule contemplates the transfer of licensed material to those persons for disposal.

Licensees must verify that the exemption holder is authorized to receive the licensed material for disposal. The transfer provisions in §§ 30.41, 40.51, and 70.42 only allow transfer “to the extent permitted under such exemption;” therefore, licensees must verify that the exemption authorizes receipt of the type, form, and quantity of material for disposal that the licensee plans to transfer. Licensees may perform this verification in the same manner that they would verify that a licensee is authorized to receive licensed material for disposal in accordance with §§ 30.41(c)-(d), 40.51(c)-(d), or 70.42(c)-(d). Licensees must maintain records of transfers of material for disposal in accordance with §§ 20.2108, 30.51, and 40.61.

#### **IV. Discussion**

This interpretive rule would apply to persons who hold specific exemptions for disposal, as well as those that would transfer licensed material to such persons for disposal. Consistent with longstanding NRC guidance on disposal by land burial outside of facilities licensed under Part 61, such disposal would also apply only to exemptions for the disposal of very low-level waste (VLLW) by land burial. Therefore, the NRC’s intent is that this interpretive rule would in effect only provide for the transfer of VLLW to persons who hold specific exemptions for disposal of VLLW by land burial.

The term VLLW is not defined by statute or in the NRC's regulations. The lowest portion of Class A waste has been referred to as VLLW. The NRC has described VLLW as waste that contains some residual radioactivity, including naturally occurring radionuclides, which may be safely disposed of in hazardous or municipal solid waste landfills. VLLW poses a small fraction of the hazard of waste at the Class A limits in Part 61. Currently, VLLW is typically disposed of either in a low-level waste disposal facility licensed under Part 61 or equivalent Agreement State regulations, or in accordance with a § 20.2002 approval of proposed disposal procedures. The NRC plans to limit the specific exemptions it issues for disposal to VLLW, because the intent is that only the least hazardous level of waste may be disposed of in exempt facilities. Additionally, the NRC also plans to limit the specific exemptions it issues for disposal to land burial, because the intent of such disposal is to safely isolate waste from people and the environment.

The NRC expects that this interpretive rule would provide an efficient means by which the NRC may issue specific exemptions for disposal, and by which licensees may transfer appropriate material to these exempt facilities. The NRC currently issues specific exemptions for the purpose of disposal in conjunction with individual § 20.2002 authorizations for offsite disposal of VLLW at unlicensed facilities. The NRC reviews licensees' § 20.2002 requests for approval of proposed alternate disposal procedures on a case-by-case basis. If a licensee proposes to dispose of the material in an unlicensed facility under NRC jurisdiction, then the NRC would issue the specific exemption to the disposal facility in conjunction with the issuance of a § 20.2002 approval to the licensee if the proposal is acceptable. If the NRC licensee proposes to dispose of the material in an unlicensed facility under Agreement State jurisdiction, then the Agreement State

would separately authorize such disposal, whether by license, exemption, or other regulatory vehicle. For these types of offsite disposals, the § 20.2002 process remains an available disposal method, and the NRC will continue to review § 20.2002 disposal requests on a case-by-case basis, and issue specific exemptions in conjunction with these approvals for disposal facilities under NRC jurisdiction, as appropriate.

## **V. Specific Exemptions for Disposal**

Consistent with longstanding NRC guidance on disposal by land burial outside of facilities licensed under Part 61, the NRC would only consider the issuance of a specific exemption for VLLW disposal by land burial. The NRC would consider approval of such an exemption if the cumulative dose were to be maintained below 25 millirem per year. Agreement States may issue exemptions subject to different criteria, consistent with their adequate and compatible programs. Applicants should request exemptions pursuant to §§ 30.11, 40.14, or 70.17. Applications should explain why the requested exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest.

Applications should include a safety analysis containing: (i) a description of the proposed method of land burial at the disposal facility (e.g., steps after arrival at the disposal facility to disposal in the ground); (ii) a description of the source term (i.e., radionuclide identification and concentration); (iii) a description of the proposed disposal site (e.g., name, location, and design and size of the disposal area including any unique features of the disposal facility); (iv) a discussion regarding the conceptual and mathematical models and parameters used in the applicant's dose assessment related to proposed disposal (e.g., site specific parameters and modeling data and results); and (v) site-specific dose assessments or sensitivity and uncertainty analyses when

performing the dose assessments to estimate the radiological impacts to members of the public and ensure that the 25 millirem per year cumulative dose limit is not exceeded. The applicant should address the cumulative effects of multiple VLLW disposals, ensuring that the dose limit is not exceeded.

## **VI. Backfit Considerations**

The NRC staff considered whether the proposed interpretive rule would constitute a backfit. Backfitting occurs when the NRC imposes new or changed regulatory requirements or staff interpretations of the regulations or requirements on nuclear power reactor licensees, certain nuclear power reactor applicants, or select nuclear material licensees. The backfitting requirements are in §§ 50.109, 70.76, 72.62, and 76.76. Provisions analogous to the backfitting requirements, referred to as issue finality provisions, are set forth in Part 52. The proposed interpretive rule is a non-mandatory, voluntary relaxation. The NRC licensee could continue to comply with the requirements of its current licensing basis or choose to adopt the alternative method of sending VLLW to a specifically exempted facility under §§ 30.11, 40.14, or 70.17. If a licensee chooses to adopt the alternative method of disposal, then it must comply with the applicable requirements. This is not backfitting because it is an additional available option that the licensee may choose to adopt.

## **VII. Specific Requests for Comment**

The NRC is interested in receiving comments from a broad range of stakeholders, including professional organizations, licensees, Agreement States, and members of the public, related to the proposed interpretive rule. Although all comments are appreciated, the NRC is seeking stakeholders' input on the following specific areas. The NRC asks that commenters provide the bases for their comments (i.e., the

underlying rationale for the position stated in the comment) to enable the NRC to have a complete understanding of commenters' positions.

- 1) This interpretive rule would authorize the transfer of licensed material to persons who hold specific exemptions for disposal without a case-by-case review and approval of the transfers. Do you think that case-by-case review and approval of these transfers is necessary?
- 2) Transboundary transfer of VLLW associated with the approved disposal actions is an important consideration. What issues associated with transboundary transfer of VLLW should be considered with this interpretive rule?
- 3) 10 CFR 20.2006 states that "[a]ny licensee shipping radioactive waste intended for ultimate disposal at a licensed land disposal facility must document the information required on NRC's Uniform Low-Level Radioactive Waste Manifest and transfer this recorded manifest information to the intended consignee in accordance with appendix G to 10 CFR part 20." Should the exempt persons authorized to dispose of certain VLLW that would be considered § 20.2001 "authorized recipients" under this proposed interpretive rule be required to use Uniform Waste Manifests (consistent with § 20.2006) for waste transferred to the exempted disposal facility?
- 4) Are there any other criteria that the NRC should consider when it reviews a request for a specific exemption for the purpose of disposal?
- 5) The regulation in § 20.2001 is currently identified as a compatibility C regulation for purposes of Agreement State compatibility. In light of this proposed interpretive rule, does the compatibility designation raise issues that the NRC should consider?

### **VIII. Public Meeting**

During the comment period, the NRC will conduct a public meeting at the NRC's Headquarters and via Webinar that will address questions on this proposed interpretive rule. Information regarding the public meeting, including agenda, scheduling, and meeting location information, will be posted on the NRC's public meeting Web site at least 10 calendar days before the meeting. The NRC's public meeting Web site is located at <https://www.nrc.gov/public-involve.html>.

The NRC will also post the meeting notice on the Federal rulemaking Web site at <https://www.regulations.gov> under Docket ID NRC–2020-0065. The NRC may post materials related this proposed interpretive rule, including public comments, on the Federal rulemaking Web site. The Federal rulemaking Web site allows you to receive alerts when changes or additions occur in a docket folder. To subscribe: (1) Navigate to the docket folder (NRC–2020-0065); (2) click the “Sign up for Email Alerts” link; and (3) enter your email address and select how frequently you would like to receive emails (daily, weekly, or monthly).

The NRC will treat all feedback provided at this public meeting as public comments on the proposed interpretive rule.

Dated at Rockville, Maryland, this 2<sup>nd</sup> day of March, 2020.

For the Nuclear Regulatory Commission.

Patricia K. Holahan, Director,  
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